Article by Alexander Graham Bell, May 17, 1908

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WORK OF THE AERIAL EXPERIMENT ASSOCIATION AS RECORDED IN ASSOCIATED PRESS DISPATCHES WRITTEN BY DR. ALEXANDER GRAHAM BELL.

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Hammondsport, N. Y., May 17, 1908, 5, p. m. —The Aerial Experiment Association, which has its winter headquarters at Hammondsport, N. Y., is an association of experimenters who are working conjointly to promote the progress of aviation in America.

At present there are five members: Alexander Graham Bell, F. W. Baldwin, J. A. D. McCurdy, Glen H. Curtiss and Thomas Selfridge. Their object is the construction of a practical Aerodrome, or flying-machine, driven through the air by its own motive power, and carrying a man.

In pursuance of this aim, the association has already built two Aerodromes.

No. 1. Selfridge's “Red Wing,” upon plans approved by Lieut. Selfridge, and

No. 2. Baldwin's “White Wing,” upon plans approved by Mr. F. W. Baldwin.

The tetrahedral aerodrome of Dr. A. Graham Bell will probably be No. 3, and then will follow Nos. 4 and 5, the aerodromes of Mr. Curtiss and Mr. McCurdy. It is expected that all these aerodromes will be built within the present year.

The two aerodromes that have already been completed have been wrongfully ascribed in the public pres to Dr. Bell, the chairman of the association. This His aerodrome has not yet been completed, and work will not be resumed upon it until June, when the 3 Scotia, where Dr. Bell has his summer home.

The work on Dr. Bell's machine progressed last year at Baddeck to the point of constructing a large tetrahedral kite known as the Cygnet, which, on December 6th, 1907, successfully carried Lieut. Selfridge up into the air to a height of 168 feet over the waters of the Bras d'Or Lake. At the conclusion of this experiment the Cygnet landed very gently upon the surface of the water, and floated there, quite uninjured by its experience in the air. It was subsequently wrecked by being towed at full speed through rough water by a powerful steam-boat. By that time the season had so far advanced in Baddeck that further experiments with Dr. Bell's structures had to be postponed until the opening of navigation in the present year.

In June the Baddeck experiments will be resumed by the association, by the construction of another tetrahedral structure upon the general model of the Cygnet, and the attempt will then be made to convert the kite into an aerodrome, by providing it with motive power.

The first aerodrome actually completed by the association was Selfridge's “Red Wing.” This aerodrome made a successful flight of 319 feet over the ice on Lake Keuka, near Hammondsport, N. Y., on March 12th, 1908, in the presence of many witnesses. This experiment was somewhat remarkable, as being the first successful public flight of a flying-machine in America, the earlier flights of the Wright Brothers at Dayton, Ohio, having been made in secret. The machine had been provided with sledge-runners, and glided over the ice for about 100 to 150 feet before it rose into the air. It then 4 flew very steadily at a general elevation of from 10 to 20 feet above the surface of the ice, carrying Mr. F. W. Baldwin as aviator.

The newspapers very generally reported the aviator as Capt. Baldwin, the balloonist, but this is a different man. Mr. F. W. Baldwin is a young engineer, a graduate of Toronto University, and a grandson of the celebrated Robert Baldwin, one of the founders of the Dominion of Canada, and premier of Upper Canada before the confederation. Mr. F. W. Baldwin is the same engineer who designed and constructed the tetrahedral tower of steel

which stands on Dr. Bell's estate near Baddeck, Novia Scotia; and the new aerodrome now awaiting trial at Hammondsport has been designed by him.

Aerodrome No. 1, Selfridge's “Red Wing,” came to an untimely end on March 17th, 1908, by an accident which completely demolished the machine, although fortunately the aviator and the engine escaped uninjured. The association then immediately began the construction of Aerodrome No. 2, Baldwin's “White Wing.”

Both aerodromes have been constructed in the aerodrome shed of Mr. Glen H. Curtiss of Hammondsport, who acts as director of experiments for the Aerial Experiment Association. The actual work of construction has been under the charge of Mr. William F. Bedwin, superintendent of Dr. Bell's Baddeck laboratory. The engine employed was specially designed for the association by Mr. Glen H. Curtiss, and was manufactured by the Curtiss Manufacturing Company of Hammondsport.

On May 13th, 1908, an attempt was made to fly the new aerodrome, No. 2, Baldwin's “White Wing,” at the race track near Hammondsport. The aerodrome had been provided with light wheels, like bicycle wheels, to enable it to run over the ground until sufficient 5 headway had been gained to enable it to rise into the air. The race track, however, proved to be too narrow to enable it to be used for this purpose, as the ends of the wing-piece were not raised sufficiently from the ground to escape contact with the raised sides of the track. The attempt was therefore made to start the machine from the grass plot contained within the oval race track, but the attachment of the wheels proved to be too weak to stand the strain of running over rough ground, and broke before much headway had been gained. The damage was repaired next day. The machine has been placed at a higher elevation above the wheels, so that it is hoped that the next experiment may start from the race track itself, instead of from the grass lawn, as the smoother surface of the track will give a better chance for getting up the necessary initial speed.

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Hammondsport, N.Y., May 17th, 1908, 8 p.m. —A preliminary trial was made this evening of the aerodrome “White Wing,” designed by F. W. Baldwin, and constructed by the Aerial Experiment Association of which Dr. A. Graham Bell is chairman. The aviator's seat was occupied by Lieut. Thomas Selfridge, U.S.A. The people of Hammondsport turned out in large numbers to witness the experiment. No attempt was made to rise into the air.

The machine had been provided with wheels, but steering gear was not attached to them, as it was thought that the aerial rudder would control the motion of the machine while on the ground. This proved insufficient for the purpose, however, for the machine could not be kept from running off the track to one side or the other. It 6 was therefore decided to make a slight change in the attachment of the front wheel, and provide it with steering gear, so as to enable the operator to steer the machine on the race track for a distance long enough to gain sufficient speed to get into the air. No attempt will be made to fly until the operators are satisfied that they have the machine under full control on the ground.

Hammondsport, N.Y., May 18th, 1908. 5. p. m.—The aerodrome “White Wing” made a short flight here today, carrying its designer, F. W. Baldwin, to a height of about 10 feet. The pressure of the air on the elastic rear edge of the lower aeroplane caused it to f?ul the propeller, and the aerodrome was therefore brought down to the ground, after having traversed a distance of 93 279 feet yards. The damage will be easily repaired.

The new steering gear, attached to the front wheel, worked satisfactorily, so that there is now no difficulty in keeping the machine on the race track while running on the ground. The race track has been widened by ploughing up a portion of the adjoining field and smoothing it with a roller.

Hammondsport, N. Y., May 19th, 1908 . 6, p. m.—Lieut Selfridge made two flights this afternoon in Baldwin's aerodrome, “White Wing.” In first experiment machine ran 210 feet in six and a half seconds, on race track, before leaving the ground, and made a flight of 100 feet in two seconds, at elevation of three feet, and ran 201 feet on rough ground

after landing, without injury to running gear. The flight was impeded by loose any wires catching 7 in propeller, but no damage resulted. In second experiment the machine made a beautiful and steady flight of 240 feet, at an elevation of at least 20 feet in the air, but landed badly in a newly ploughed field. The aerodrome is uninjured, but the truck carrying the front wheel ploughed into the ground, and front wheel injured. The damage can be easily repaired. The members of the Aerial Experiment Association are encouraged to belie f ve that the engine has abundant power, and that the machine is under good control in the air, so that skill alone on the part of the aviator is all that is needed to accomplish much longer flights.